



QUEENSLAND
NATIONAL PARKS
AND WILDLIFE
SERVICE

Summer 1982

Ringtail

1982, my second full year as the Minister responsible for National Parks in Queensland, proved the most challenging.

In a year when purse strings have been tightened not only in Queensland but worldwide, the National Parks and Wildlife Service has done an outstanding job.

It requires a lot of sensitivity and understanding to deal with many challenges that arise every day. But I believe the Service has handled them well and now boasts a public image that has never been better.

Much of this is due to teamwork. The best example of that was the recent efforts of National Parks Rangers and Officers who joined with the public to fight bushfires in Central Queensland.

I was fortunate this year to have spent more time in the field gaining an appreciation of the work being carried out there.

Field work is essential because it presents the real situation and not one created by words on an office file.

The efforts and dedication of all National Parks staff has not gone un-noticed, and I appreciate the manner and spirit in which the job has been carried out.

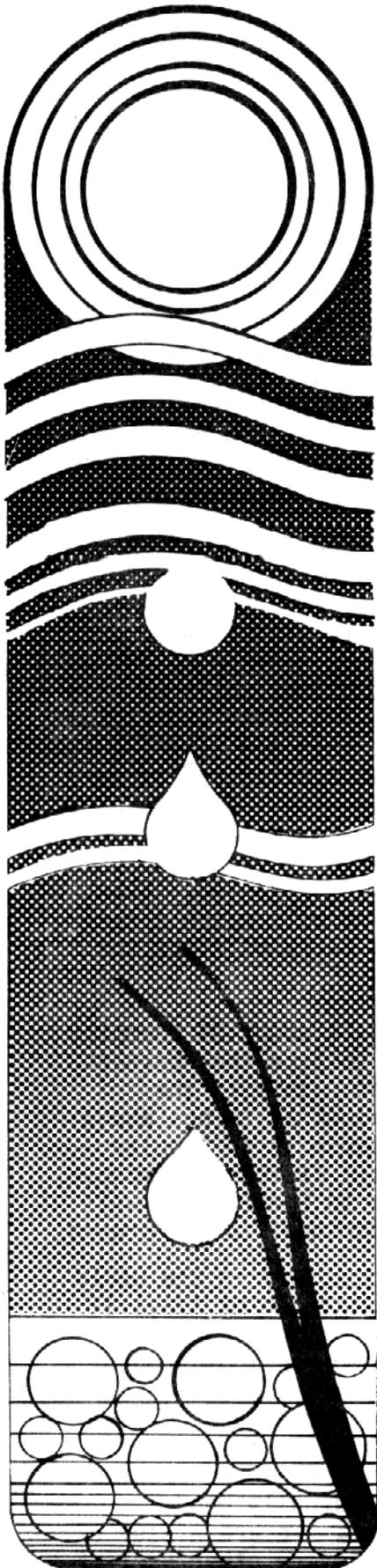
I look forward to your continuing support as we work towards establishing and managing a National Parks system of which we can all be proud.

I wish all staff and their families a safe and holy Christmas and that 1983 brings you good health and happiness.

Regards
J.A. Elliott

J.A. ELLIOTT

MINISTER FOR TOURISM,
NATIONAL PARKS, SPORT AND THE ARTS



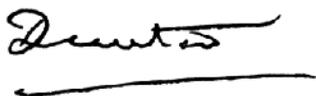
Fellow Staff,

What an exciting year of change and progress. Although we lost some dedicated stalwarts who'd helped shape the Service in its formative years, we've recruited equally dedicated and competent replacements. Not to mention, of course, the marine parks staff who bring with them an exciting new dimension to Service activities.

So many major advances have been made throughout 1982 that it would be wrong to try and highlight one or two in this brief message. Progress can only come with pain, unfortunately. And the pain we suffer from taking on these new and exciting initiatives, these increases in staff numbers, these large increases in the Service estate, is that of the enormous additional stress placed on our infrastructure. And I refer to our clerical staff. They never seem to get the breaks, the pay increases, the field trips and so on that technical and professional staff so often enjoy. Every new, technical initiative means more work for proportionately less clerical staff. My resolve in 1983 is to do something to correct this injustice.

Thank you one and all for your loyalty and support throughout the year.

Mrs Saunders joins with me in wishing you and your loved ones every joy for Christmas and good health and happiness in 1983.



Christmas message from Deputy Director (Technical)

The Christmas edition of Ringtail is a fitting place for the Director and Minister to send greetings and in the normal way, I would leave it at that. However, time spares no one and I suddenly realised that this will be the last Christmas edition of Ringtail

at which I will be a member of the Service. I retire towards the end of 1983.

For this reason I am taking the liberty of giving you a few thoughts for Christmas.

The Service in some respects could find itself in the role of a 'born loser'. We came into being at the very crest of the environmental wave in 1975, and I think everyone was confident that we would ride it right to the beach; but instead of that in terms of Public Service fortunes, the wave turned into a real dumper. Shortly after we found the crest, we were dumped into a no-growth situation and it has been that way ever since. Our corporate nose gets full of sand, we are scrambling to find our feet, and at times we find our corporate lungs bursting and the temptation is just to give up the struggle and slowly drift out to sea.

But I don't think we are about to do this. I hope not. The fact that we see all around us, departments which have a longer history and are more firmly established, seeming to get an easy road to expansion, while we have to put up submission after submission and be told that this one is not quite right and to come back again, is very difficult to live with. But the only way to win is to show determination and doggedness and hang in there and come up and gulp air and fight on. Eventually I'm sure, we will catch a real boomer that will carry us right the way forward.

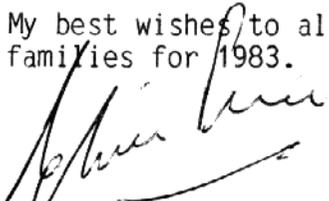
Lots of people talk about 8% unemployment. I prefer to take the approach of 92% employment. This is the positive way to look at things and I think that our cause is so popular that when economic factors do improve, provided we hang in there, ours will be the first department to go forward.

There's certainly no way in the world that I'll be coasting in my final 11 months service. I'm just not built that way. And when you look around it is surprising the help one gets from the most unexpected and unlikely quarters. The thing to cultivate is good will, and with reasoned arguments I believe that eventually good compromises result. We are a user of land, and as such every other user of land has to be potentially wary of us: we are a threat to him. We have to

expect that not all local authorities will welcome us; we have to expect that such vested interests as other commercial land users will also be wary of us and will instinctively discredit us. But it is difficult for fair-minded people to keep up unreasoned hatred and it is up to us to ensure that what we are asking for is reasoned and reasonable.

So as Christmas '82 comes around, can I wish you patience, persistence, and peace of mind, because I believe that things will come full circle and we will again regain our place as one of the most popular of political causes.

My best wishes to all staff and their families for 1983.



Clive Price

The story that Ed Power has recently had a hair transplant is absolutely without foundation.

In a statement issued through his solicitors Mr Power said 'The simple truth is that I was fighting bushfires at night, and had no hard hat on. I've got 42 stitches in a 5 inch (sorry, 12cm sounds more impressive) cut on my head to remind me to wear one day or night on fire fronts where overhead dangers exist.

'There was a nasty story circulating that I was becoming a punk rocker and had got the reverse Mohawk haircut. I can assure my many friends that the pink colour which served to confirm the story was not hair dye but mercurochrome and the green tinges were mycozol in case I got secondary ringworm.

'Furthermore I was unable to understand the merry office laughter when Kev Bade said 'Gee Ed, I'm glad it didn't hit you in a vital spot.'

In a bedside interview Mr Power said nothing. He was too busy with his self-imposed task of writing 42 times (one for each stitch) 'Accidents do not happen - they are caused.'

World National Parks Congress - Bali

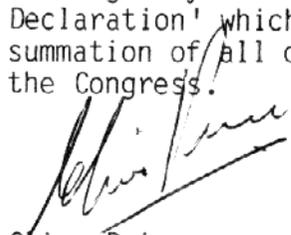
During October, I had the honour to represent the Service at the Third World National Parks Congress which was held in Bali, Indonesia. I have yet to complete my detailed report on the Congress, and I think it would be unfair to the Director to pre-empt too much of it in this magazine.

I can say however, that it was a pretty exhausting fortnight and I have about 100 scientific papers to prove that I listened to a great deal of comment from all over the world. Problems seem to be the same the world over, and our Service is not alone in its need for more staff and resources. Furthermore, the attitude in this country, despite the fact that many of the lay conservation organisations would not agree with me, is far more enlightened towards our natural treasures than the attitude in some other countries of the world.

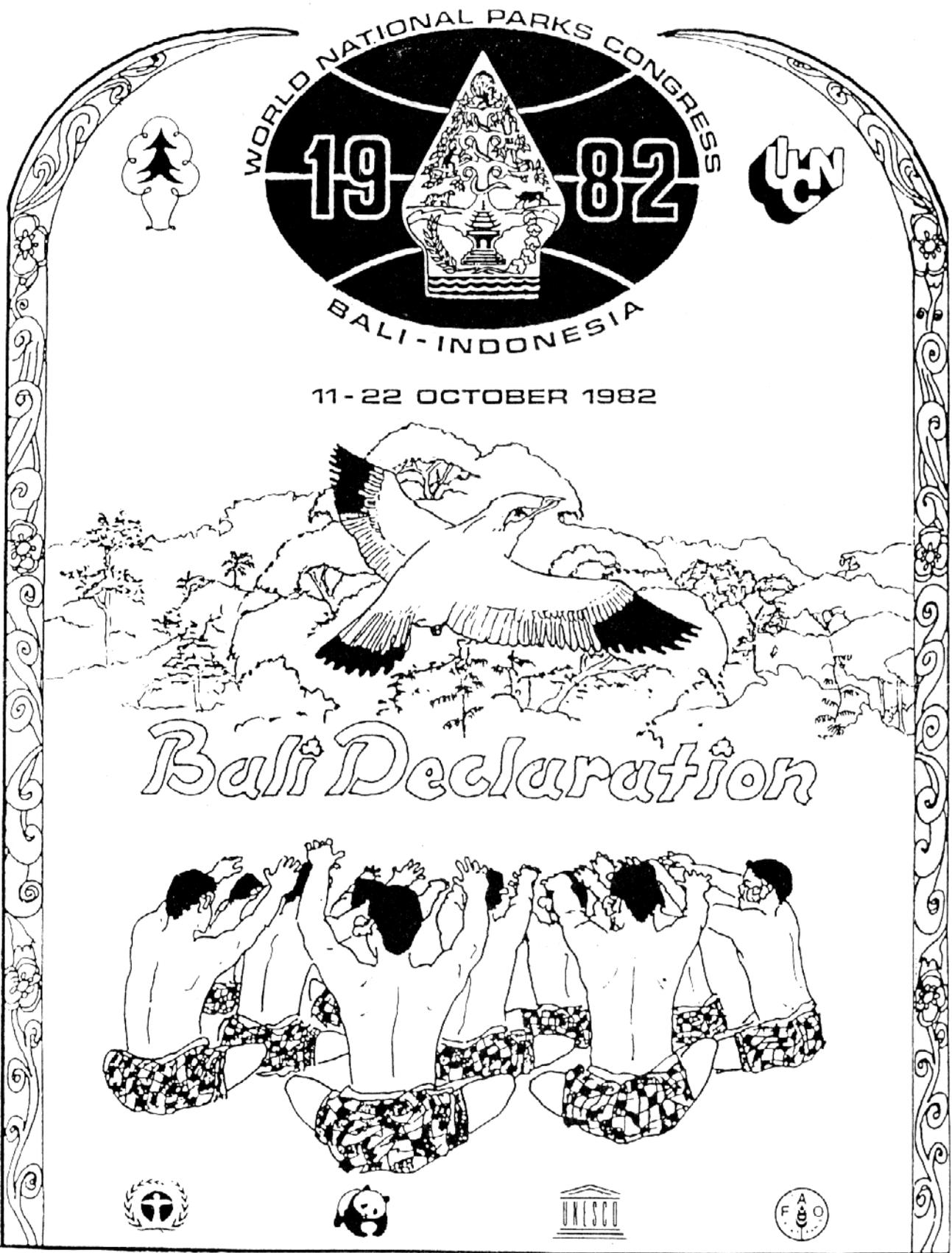
We heard for instance, that Brazil has now only 1.4 of her Atlantic seaboard forests left and in the process, has sent to extinction two of its 17 primates, with another 13 being on the endangered list.

However, I must stop before I am doing what I said I would resist doing in pre-empting some of the comments that I will be making to the Director in my report.

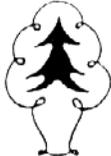
Perhaps the best way for me to conclude is to give you verbatim the 'Bali Declaration' which I think is the summation of all deliberations had at the Congress.



Clive Price



WORLD NATIONAL PARKS CONGRESS
1982
BALI-INDONESIA



11-22 OCTOBER 1982



Bali Declaration



The Bali Declaration Meeting in Denpasar, Bali, from 11 to 22 October 1982, in response to the generous invitation of the Government of Indonesia, the World National Parks Congress considered principles and policies to guide the establishment and management of national parks and other types of protected areas in light of the broad principles governing the interrelationships among population, resources, environment, and development formulated by the series of inter-governmental conferences that began at Stockholm in 1972. The Congress took particular note of the World Conservation Strategy (1980) and reaffirmed the fundamental role of national parks and other protected areas in contributing to sustainable development and the spiritual and cultural needs of humankind. Participation included planners, managers and supporters of protected areas and scientists from 68 countries.

DECLARATION OF THE WORLD NATIONAL PARKS CONGRESS: BALI, INDONESIA, 11-22 OCTOBER 1982

WE, the participants in the World National Parks Congress, BELIEVE that: People are a part of nature. Their spiritual and material well-being depend upon the wisdom applied to the protection and use of living resources. Development needed for the betterment of the human condition requires conservation of living resources for it to be sustainable.

Earth is the only place in the universe known to sustain life, yet as species are lost and ecosystems degraded its capacity to do so is rapidly reduced, because of rising populations, excessive consumption and misuse of natural resources, pollution, careless development, and failure to establish an appropriate economic order among peoples and among States. The benefits of nature and living resources that will be enjoyed by future generations will be determined by the decisions of today. Ours may be the last generation able to choose large natural areas to protect.

Experience has shown that protected areas are an indispensable element of living resource conservation because:

they maintain those essential ecological processes that depend on natural ecosystems;

they preserve the diversity of species and the genetic variation within them, thereby preventing irreversible damage to our natural heritage;

they maintain the productive capacities of ecosystems and safeguard habitats critical for the sustainable use of species;

they provide opportunities for scientific research and for education and training.

By so doing, and by providing places for recreation and tourism, protected areas make an essential contribution to sustainable development.

At the same time protected areas serve the spiritual and cultural needs of people by securing the wilderness and sacred areas on which so many draw for aesthetic, emotional, and religious nourishment. They provide a vital link between us, our past, and our future, confirming the oneness of humanity and nature.

To these ends, therefore, WE DECLARE the following actions as fundamental:

- 1 Expand and strengthen the global and regional networks of national parks and other protected areas to give lasting security to: representative and unique ecosystems; as full a range as possible of earth's biotic diversity including wild genetic resources; natural areas important for scientific research; natural areas of spiritual and cultural value.

- 2 Support the establishment and management of protected areas through national commitment and international development assistance.

- 3 Provide permanent status for protected areas in legislation securing their objectives against compromise.

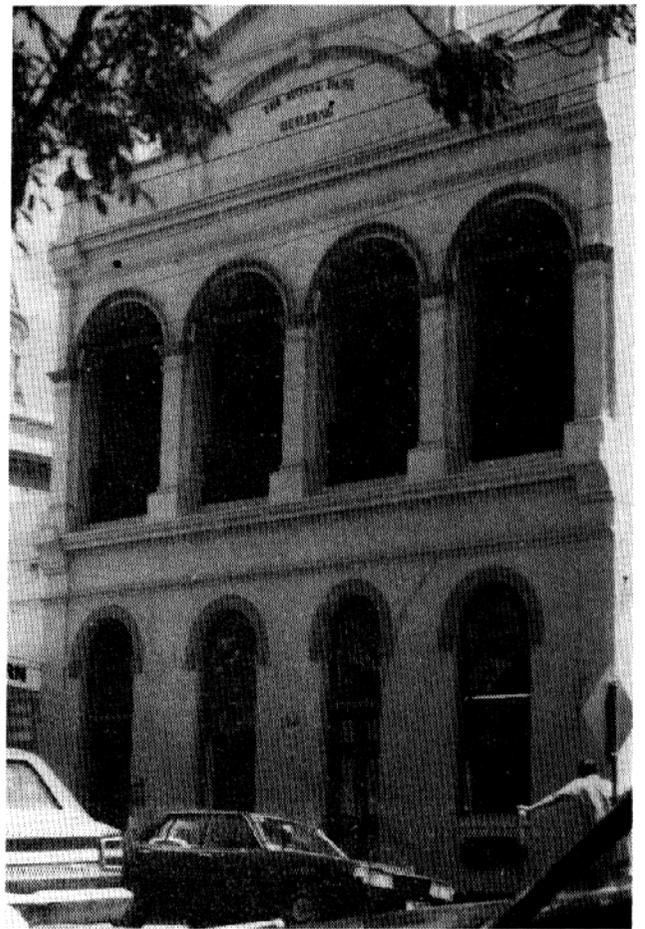
- 4 Plan and manage protected areas using the best available scientific information; increase scientific knowledge through research and monitoring programmes; and make it readily available to scientists, managers, and the general public throughout the world.

5 Recognise the economic, cultural, and political contexts of protected areas; increase local support for protected areas through such measures as education, revenue sharing, participation in decisions, complementary development schemes adjacent to the protected area, and, where compatible with the protected area's objectives, access to resources.

6 Implement fully the existing international conventions concerning protected areas, and adopt such new conventions as may be required.

WE PLEDGE ourselves to these actions as a contribution to sustainable development and hence to the spiritual and material welfare of all people; and

CALL UPON all Governments, singly and collectively, to take these actions with due despatch, bearing in mind their responsibility for the whole of life and their accountability to present and future generations.



The ground floor of the Royal Bank building, Rockhampton, is now home for the recently appointed Marine Parks staff -- six graduate officers, five technicians and two clerical officers.

ZOOLOGICAL NOTES

The sexual desires of the camel
Are greater than anyone thinks;
After wandering for weeks in the
desert
He makes carnal attacks on the
Sphinx.

But the Sphinx' most intimate
organs
Are filled with the sands of the
Nile;
Which accounts for the hump on
the camel.
And the Sphinx' so inscrutable
smile !

Anon.

The common cormorant or shag
Lays its eggs in a paper bag.
The reason you will see no doubt
It is to keep the lightnings out!

But what these unobservant birds
Fail to realise, is that herds
Of bears with buns
Will steal the bags to hold the
crumbs.

Trad.

They will be responsible for:

- Day-to-day management of the Great Barrier Reef Marine Park Capricornia section under the provisions of the Commonwealth Great Barrier Reef Marine Park Act.
- Management of the Queensland Marine Parks under the provisions of the State Marine Parks Act 1982 (which is administered by the Co-ordinator General's Department).
- Management of the island national parks which lie within the Capricornia Marine Park under the provisions of the Forestry Act.

The public contact counter for all Service inquiries will be located in the building when furniture and fittings have been supplied.



MARYBOROUGH OPENING

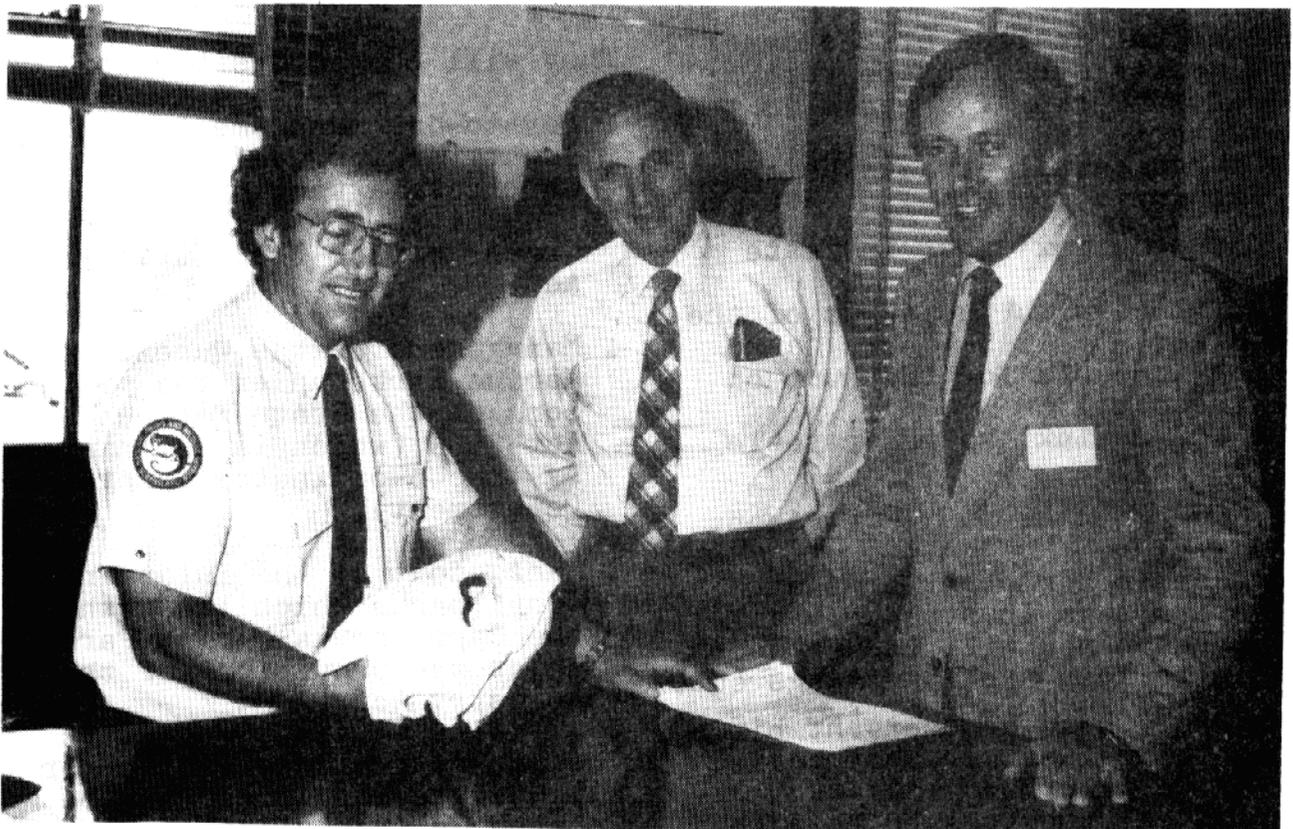
The Maryborough regional office, opened on 12 November, might be more than 100 years old but staff are as proud of their building as if it were a new one.

The official opening by the National Parks Minister, Tony Elliott, brought together many

Service officers and local representatives.

With the Minister were the Director, Dr Graham Saunders, and the National Trust president, Mr Rod Nunn.

The two-storey colonial style building was erected at the corner of Wharf and Richmond Streets



Regional superintendent Mr Tom Ryan showing a turtle skull to the Director, Dr Saunders, and the National Parks Minister, Mr Elliott.



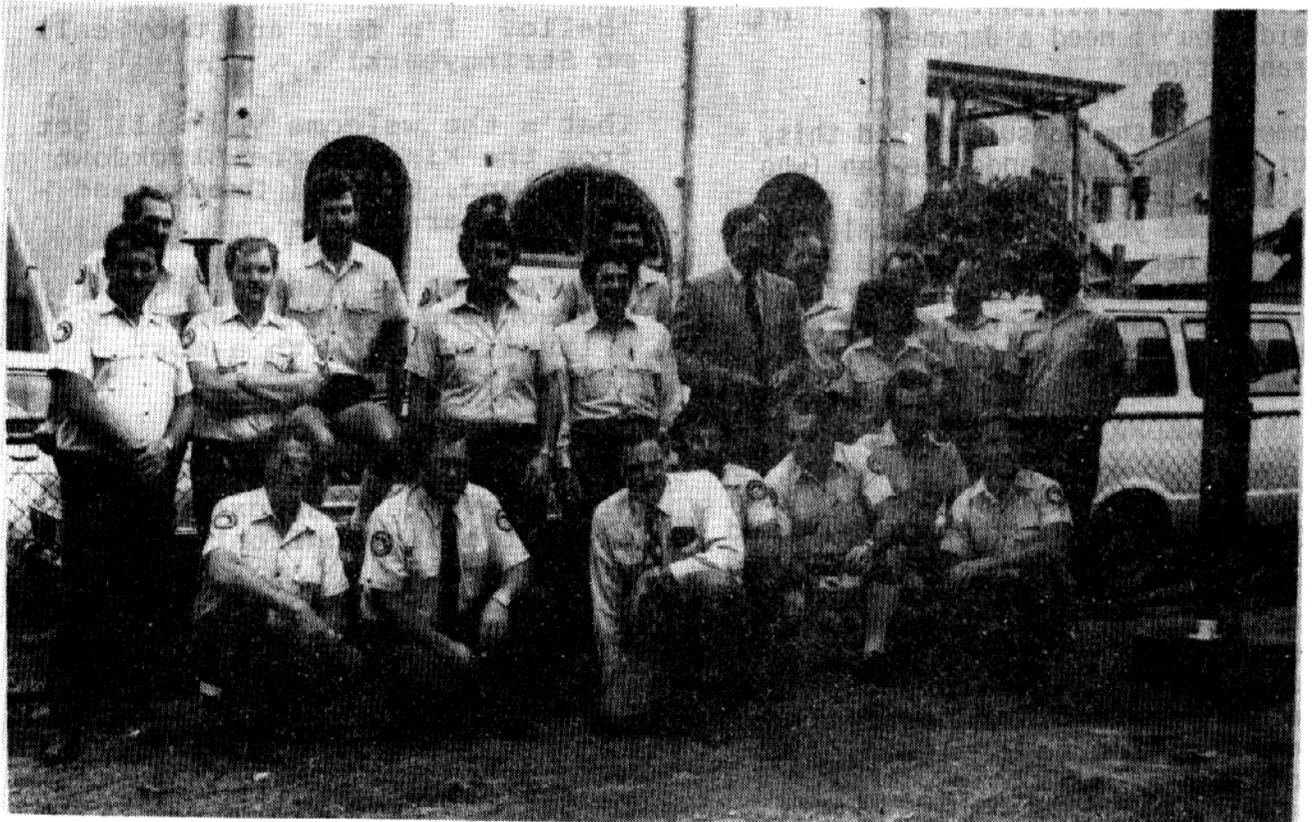
in 1878 for the Bank of New South Wales to replace a building put up in 1868 to handle gold from the newly discovered goldfields in the region.

The 1878 building had hardwood floors, and roofing timber of hoop pine, possibly logs from Cooloola.

Fittings, doors and so on were in red cedar.

The banking chamber was on the ground floor and the manager's residence above.

Features include wrought iron lacework and iron columns.



Maryborough regional officers with Mr Elliott and Dr Saunders after the opening of the regional office in Maryborough.

An addition was made in 1940. The bank moved out in 1956. In recent years, the building was occupied by Telecom.

The Works Department with Service staff have helped restore the building, though complete restoration might take 10 years.

Contributions of cedar have enabled construction of a magnificent large office counter on the ground floor in a style in keeping with the old building.

After the opening, the regional director Mr Tom Ryan was host at a morning tea for guests and officers.

Many regional officers were in Maryborough for the occasion and took the opportunity to discuss a range of problems.

Dr Lavery has gone to Tokyo to assess if the leading zoos there can keep koalas with a chance of success.

As part of the publicity, our brand new Information Officer, Don Marshall, got a photo of him with a koala. It was suitably captioned in English; but Don being the professional he is, said 'You'll need a Japanese translation.'

Someone at the Consulaté did this, but when Carolyn Sandercoe-San (who was a Rotary exchange student in Tokyo some years ago) retranslated to keep her Japanese polished up, it said 'This are Doctor Ravery with one koara. Doctor Ravery are the one wealing grasses.'

STAFF WELFARE COMMITTEE

The State Service Union Council at its November meeting advised that the Executive had received a request from members employed in the Queensland National Parks and Wildlife Service for approval to establish a Welfare Committee as is provided for under the constitution and rules of the Union.

Council accepted an Executive recommendation that such approval be granted.

Hello, Stringybark!



'Hello. I'm four and they call me Stringybark!'

That's the welcome you will get from the King of the Blackdown Tableland, Central Queensland - Steven Pearson.

Steven, son of Ranger Steve Pearson and wife Allison, is a livewire boy with a most friendly outlook.

Hardly a visitor would leave the Mimosa Creek camping area near his caravan and annexe home without being confronted.

On November 13 and 14, the Pearsons were host to the National Parks Minister, Tony Elliott, a party of Service officers, members of the Central Highlands Sandstone Consultative Committee of landholders and grazier, shire, conservation and tourism representatives.



Mr Pat Smith, of Planet Downs, Rolleston, regional superintendent Kevin Bode and regional ranger Ed Power at morning tea.

A 17,430 hectare extension to the sandstone park was gazetted on the Saturday morning to bring the two-part reserve to about 23,800 hectares.

This makes it another major national park in the Central Queensland sandstone region.

But the land was nothing new to

Steven. He has been living there for two years as his father worked in conjunction with Forestry to prepare the area for park status.

Steven has his toys in his sandpit but everything nearby is on a much grander scale - Dad's tractor and more sand, rocks, cliffs and trees one could hope to see in years.



Billy tea for visitors to Horseshoe Lookout, Blackdown Tableland NP.

And with 20,000 visitors a year already, particularly from nearby Blackwater, Steven has plenty of new faces.

The Minister led an active group through the park and Forestry areas, on the Saturday.

After morning tea at the newly developed Horseshoe Lookout, a convoy took to the four-wheel-drive loop road for more lookouts and to discuss park management proposals.

A long walk around the gorge edge to Rainbow Falls followed. The Minister was not deterred by the steep cliffs and was one of the few to take off later down the gorge including a rope section to see more spectacular groves.

A slide show at night by Steve excited the imaginations of all. Graham Walsh surprised with his comments of areas still to be examined by man.

For four years, he has been employed by the Service to examine and report on Aboriginal artifacts and art.

A formal meeting of the consultative committee on Sunday morning considered a wide range of topics ranging from bushfires and land tenure conditions to preservation of rock art and rare tree communities.

Committee members praised the Service for its regional parks management.

While in Central Queensland, the Minister also visited the Taunton Middle nail-tailed wallaby reserve spotlighting many wallabies during an hour's drive with Ranger Paul Tierney.

PARK CHANGES

Since the last issue, the following changes have occurred in the national park and environmental park estates:

Former lot 4 on RP 179709, parish of Clumber, has been declared national park, subsequently amalgamated with the existing Mt Greville National Park (NP 755,

parish of Clumber) in the Fassifern Valley south-west of Brisbane.

An area described as portion 361, parish of Mooloolah, and abutting Eudlo Creek and given to the Service by Mr H.E. Corbould, has been declared an environmental park.

Land also donated by Mr Corbould described as portion 121v, parish of Byron, near Byron Ravine, Mt Mee, has been declared an environmental park.

Tryon and Erskine Islands in the Capricorn group north-east of Gladstone now have national park protection.

Land near Lake Weyba south-west of Noosa with an area of almost 150 hectares is a new environmental park. This land was also donated to the Service by Mr H.E. Corbould.

Some 15 hectares of land in freehold portions 18A and 19A, parish of Mudgeeraba, purchased from Mr and Mrs David Fleay, of West Burleigh, has been made an environmental park.

Here's a very welcome Christmas message to all of us. It came on a Christmas card sent by Mr and Mrs V. Shaw, 'Glocca Morra', 9 Hinchcliffe Road, Logan Village, who asked for some parks literature to send to America. A letter of thanks has gone out and the request has been met.

It made my day and I'm sure it will cheer you up too:

"It's a beautiful State and the work of your department is exceptional. I have been to other States in Australia, but Queensland is really a dream come true. Both yourself and your department don't seem to get the credit that's due, perhaps Australians just accept; but visitors certainly can see and appreciate the department's efforts. I am now a permanent resident of Queensland and love it".

Meet D/D (Admin.)

Mr A. 'Joe' Winterton is the Service Deputy Director (Administration) appointed in September.

While he has long been an administrator in the Queensland public service, he holds a diploma in horticulture from Queensland Agricultural College, a Queensland University science degree with majors in botany and geology, and a Diploma in Business Administration from the Queensland Institute of Technology.

He joined the Department of Primary Industries in 1942 and served for 13 years as a field officer in north Queensland and Boonah.

After his university course, he was put in charge of tobacco research in Queensland when this was in its heyday with five stations (Yes, Joe smokes!).

He then became senior administration officer in DPI personnel, and later Assistant Director of information services which included the rural information and journal production. He later became assistant to the DPI Director-General.

Then three years ago, he was appointed Deputy Director of the Queensland Fisheries Service. He transferred to the Q.NPWS when the marine parks section was formed.

In his spare time, Joe likes to 'make things' - carpentry and mechanical work.

His hobby is bowls. He has won his club pairs competition and is in the final for the second year.

Good luck Joe!



Peter Stackhouse had this unique shower to return to at Mt Moffatt.

FIERY TIME

Storms early in December brought relief after some eight weeks of firefighting for Service officers and volunteers in the Carnarvon National Park region.

In all, some 75 percent of the Mt Moffatt section was burned through, and up to 50 percent in some other areas.

While some burns were very slow, others were fierce, and only from the air could the intensity of fires on the tops of apparently inaccessible sandstone plateaus be seen.

The Service was criticised by some graziers and reporters in some newspapers -- very unfairly in the Service view, as only one fire started in a park area.

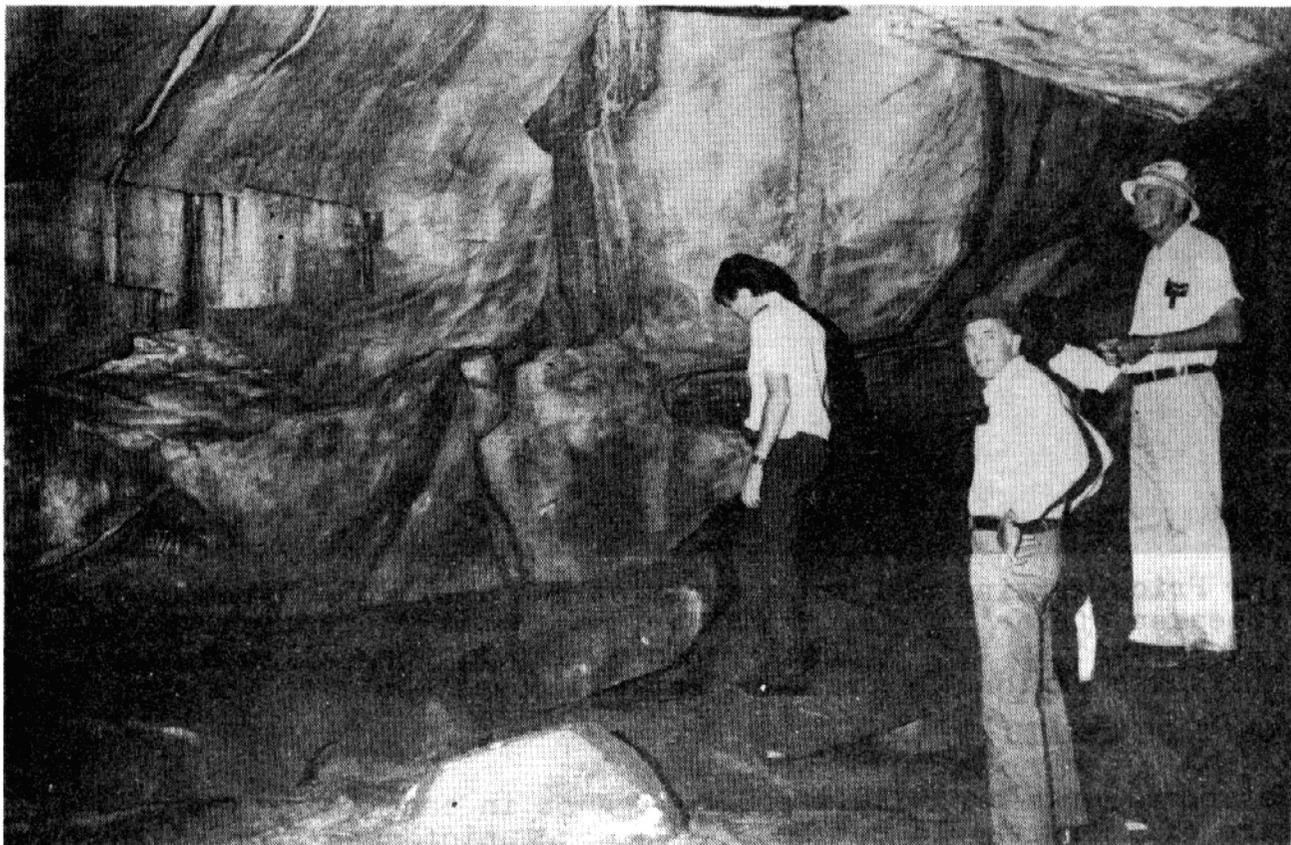
Replies were sent quickly but were not always used in the media. Dr Saunders and Mr Price, a former Forestry Department fire protection officer, visited Dooloogarah station and Mt Moffatt on November 19 and saw the effects of fires from the air and on the ground.

As many as nine Service officers were involved in the firefighting including the cutting of breaks and backburning in some of the State's most rugged country.

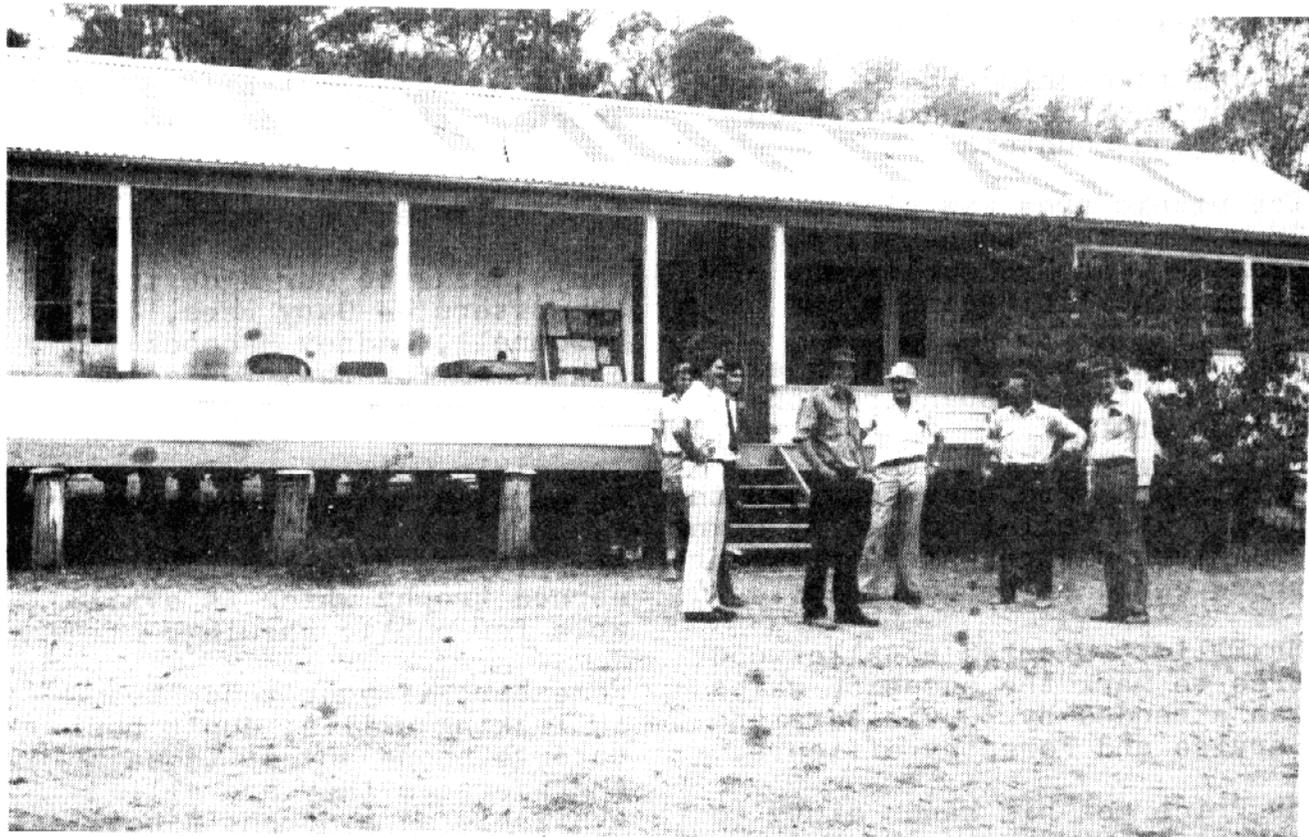
Despite fires, the country quick-

ly showed signs of regeneration and with continued rain will be a picture of green early in the new year.

After all, fire is a fact of nature in this country, and is a part of land management.



Dr Saunders and Mr Price in Kenniff Cave while visiting Mt Moffatt.



A Service "herod" outside the Mt Moffatt homestead, Carnarvon NP.



Mr Price getting his hands dirty at The Knoll NP assisting the Speaker of Parliament, Mr Muller, at the tree planting. In the background is the National Parks Minister, Tony Elliott, and Brisbane regional superintendent Des Jones (holding the crowbar).

DON'T BE AFRAID

National Parks and Wildlife Service officers should not be afraid to close parks, the National Parks Minister, Tony Elliott, said on December 14.

He was re-opening the picnic area at The Knoll National Park on Tamborine Mountain.

The picnic area was closed for 18 months for regeneration, tree planting, and redevelopment of picnic facilities and a car park.

The project was a training exercise for the Brisbane regional office staff.

Mr Elliott said that provided the public was well-informed by signs and given the reasons for closure there could be no complaint.

Mr Elliott planted a tallowwood tree to mark the occasion which was attended by 30 visitors and Service and Forestry officers.

Mr Price got his hands dirty to ensure the tree was planted firmly.

Just in case there are still some uninformed sports' lovers in NPWS, Cathy Nance, Robyn Kreis, Trisha Gilmour and Di Rees made an all out gallant effort to take out the GRAND FINAL of the Metropolitan Touch Football Association.

They defeated the 'slightly less talented' opponents 1-0.

Many thanks to our sideline supporters -- Gary Rees, Jim McDonnell, Rodney Hancock and others -- for their welcome verbal abuse comments.

The girls were strongly encouraged to try harder.

All players received a well-earned trophy which is available for public showing.

Remember, if your touch team is lacking skills, don't hesitate to phone any of these A graders as they are all available at a moment's notice !

A FAMILIAR FACE ?

Is this character in a Moir cartoon familiar to you ? If not, he hopes he will be very soon.

He is Don Marshall, the Service's own brand new information and publicity officer, also described as the Service's answer to Harry Butler !

Don joins the Service after 26 years at The Courier-Mail as a journalist, sub-editor, feature and travel writer etc including 11 years as pictorial editor.

For a few years more than 26 he has been tramping around national parks in south-east Queensland, interstate and overseas.

You may recognise his name from an unknown number of feature articles on national parks over the years, more particularly the "Great Weekend" series, the most popular series produced by The Courier-Mail going to a reprint in booklet form.

In his spare time, he likes to get away to parks with his wife Tric and three children. Alternatively, he has a 10.4 m diesel cruiser and can be found in the Jumpinpin and southern Moreton Bay waters.

Don is an amateur radio operator, callsign VK4AMA. Electronics and other tinkery things keep him busy.

He has a long association with the Scout movement and the coming Australian Jamboree has set him some formidable tasks.

The Service found him quickly with a three-day visit to Central Queensland in his first week and a day trip to the Carnarvon fires soon after that. Don produced press reports and pictures from the visits.

Don's plea to Service staff is to let him know quickly of reports of the Service -- good or bad -- for action if necessary.



STOP PRESS

Two of the Service's most important 'vehicles' of public relations are now available.

These are the 1983 calendar and the new camping guide.

Copies of the calendar have been sent to a wide range of Service supporters but some spares will be available initially at head office.

The camping guide incorporates new policy standard for the Service across the State.

All Service officers should become aware of its details as soon as possible as applications for Easter camping can be made as early as January 7.

FUN AND GAMES

(or the Green behind the Gold)

The Queensland National Parks and Wildlife Service was asked to assist the 12th Commonwealth Games Australia (1982) Foundation Limited through its Games Village Entertainment Committee by providing guided bushwalks of the Griffith University (Games Village) site for the 'village people' - athletes and their support team and village staff.

A basic text was produced by the Interpretation Section for a kilometre circuit bushwalk at Griffith aimed at introducing overseas visitors to the Australian bush.

The walks were offered twice a day (9 a.m. and 3.30 a.m.) for a two week period and were guided by Gil Field (Interpretation), Mark Gough and Russell Claus (Management and Operations Parks Section).

The bushwalk circuit was through an excellent sample of dry open eucalypt forest complete with creek and critters! Although in total few took advantage of the guided walk opportunity, the response from the overseas visitors was excellent, nearly all never having been to Australia before.

They marvelled at kookaburras and grass trees, the inimical eucalypt, termite mounds and the occasional red-backed wren. It was a thrill to have such a receptive group - (a captive audience given the Games Village security!).

The Service guides were infected by the Games spirit (I'm not having a crack at you this time Mark!) and were thrilled to be part of this international experience.

The village Entertainment Committee had organized a wide variety of 'Australiana' activities of which the Service involvement with the bushwalks was only one part. Simon Maclean and Rolf Harris were there graffiti-ing and flogging calendars; Lone Pine fronted with a few koalas and wallabies; Rob Scerman (Public Service Board) did the tea and damper bit (you think the discus looks good!), some clown was presumably doing a shearing exhibition (not Judy Livermore's locks Russell - behave!!), the University produced a brochure - 'The Natural History of Griffith University' and the City Council and the Wildlife Preservation Society produced a 'Chandler Bushwalk' broad sheet for that equally magnificent site well planted and preserved in native trees. Have I forgotten anything besides Matilda and the kookaburra chorus.

It was a fair commitment in time from the Service - probably warranted by the significance of the event alone. Given the basic tenet of interpretation 'What's it do for conservation' we may see a few new international subscriptions to World Wildlife Fund - but what has been attempted is to gain maximum exposure to the Australian natural and cultural heritage theme of the Games so the spectre of international appreciation and concern and our responsibility internationally in preserving our heritage is made apparent to all Australians.

To this end an independent journalist with the 'Village Courier' has been inspired to pursue 'another side of the Games' (Green behind the Gold) article to collate the heritage theme for Australian readers.

The text of the bushwalk is included in this issue of Ringtail for its value as a basic introduction to the Australian bush and to further your fervent desire to follow in the footsteps of some of our international athletes (without having to step out onto QE2).

Gil Field

COMMONWEALTH GAMES BUSH WALK

Originally forest & woodlands covered only 40% of the Australian continent the other 60% being comprised of low growing plant communities such as shrubs, heath, herb and grasslands and deserts.

This lack of forest cover is indicative of the harsh environmental conditions with which plant communities must contend on this ancient island continent. It is these conditions of drought, fire and poor soils which have led to the vegetational adaptations that so characterize Australian plant communities.

We are going to explore an Australian forest community and observe some of the characteristics of Australian vegetation and perhaps see some of the animals that inhabit this environment.

THE FOREST

Australian forest types can be classified according to the extent of foliage canopy cover and the dominant tree species within.

A closed forest is one in which the interlocking crowns of trees form a canopy cover of over 70%, as in a rainforest.

An open forest allows between 30% and 70% of the available sunlight to reach through the forest canopy, whereas a woodland is where there is less than 30% canopy cover. What type of forest do you think we have here?

Australian forests are dominated by a number of plant groups, in particular the eucalypts and wattles. Consequently they are often further classified by the dominant eucalypt or wattle species present.

So this forest type is classified as an open eucalypt forest dominated by spotted gum and red ironbark species.

EUCALYPT TREES

Eucalypt trees are characterized by the eucalyptus oil content of the leaves, the buds that protect the flowers and the gum nuts that house the seeds.

See if you can locate some of these gum nuts on the eucalypt trees or on the ground beneath them.

There are over 500 species of eucalypt but, distinct groups of eucalypt species can be identified by bark type. Hence there are stringybarks, ironbarks, gum-barks, half-barks, bloodwoods, box, ash and peppermints!

In this forest can you see the difference between a deeply grooved ironbark, a fibrous stringybark and a gum-barked spotted gum?

The adaptations of eucalypt species to Australian environmental conditions have meant that over time they have evolved preferential patterns of distribution that you can see evidence of on this walk.

Look for what species of eucalypt is growing on the shallow soiled ridges, and down towards the creek where there is a build up of soils washed down from the ridges.

A characteristic drooping nature is a feature of many eucalypt leaves. This is an adaptation to minimize water loss by the leaves turning edge on to the drying sun.

THE CREEK

You are now at the headwaters of Mimosa Creek where the swampy condition of the creek bed favours tree species that can tolerate wet feet, like the thick fibrous-barked swamp box (*Tristania suaveolens*) and the paperbark tea-tree (*Melaleuca quinquenervia*). Paperbark swamps can be extensive wherever poorly drained land is inundated frequently by water. This tea-tree flowers profusely, and the nectar from the flowers is eagerly sought after by honeyeaters, insects and bats.

Perhaps you can hear the honey-eating birds now? Look for the scarlet and yellow faced honeyeaters that frequent this forest type.

The tea-trees thick layered paperbark is a protection against fire that can rage through the Australian bush. Consequently the paperbark is often singed black from these fires.

The Aborigines used paperbark for housing shelters and for burial wrappings. Today nurserymen use paperbark for plant basket linings.

Ferns are common in Australian forests where there is adequate moisture retention in the soil. Can you see the tree fern in the creek? The Bungwal fern (*Blechnum indicum*) is commonly found in paperbark swamps and was a favourite food of the Aborigines. They made a type of bread from its root.

FIRE

Have you noticed evidence of fire on this bush walk? Australia's forests and plant communities have adapted and evolved with the hot, dry conditions which most of the continent experiences at least some time over the year. Consequently many Australian plants have special adaptations to survive bush fires which can be a common occurrence in dry seasons. The eucalypts can shoot new growth from their trunks and roots if their crown of branches and leaves is destroyed by fire. Many have thick protective bark that insulates against fires, like the ironbarks and paperbarks you saw earlier.

The *Xanthorrhoea* or grass tree also has a thick insulating trunk made up of old leaf bases that protects the growing tip within from heat, so that they can rapidly reproduce the long needle-like leaves after being burnt. These fire-blackened trunks and tall flowering spikes that have been likened to spear shafts have inspired the description of *Xanthorrhoea* as 'black boys'.

The plants like the hakeas, banksias, wattles and casuarinas that you can see on this walk have developed seek pods, nuts and cones that often require intensive heat to open. After a bush fire, these dried out capsules soon open and distribute the seeds into the fresh ash bed left by the fire. So the forest understory is able to replenish itself after the devastation of fire.

See if you can observe some of these pods, nuts or cones on the walk. They are a favoured food of the Australian cockatoos, parrots and rosellas.

After a fire, many other plants send out new shoots from underground stems, whereas a feature of many grass tree species is that they require fire to stimulate flowering. The Australian Aborigines used fire as a tool in driving animals out of hiding, and also to encourage regrowth of plants, especially grasses that would attract animals like kangaroos and wallabies.

SOILS

The roadside cutting is a suitable spot in which to see the poor, shallow, stony soils with which this eucalypt forest and many Australian plant communities must contend.

There have been no active volcanos for many millions of years in this and most other regions of the ancient Australian continent. Hence, most of the fertile soils formed from volcanic rocks have been eroded away by wind and rain. Now the bulk of the Australian continent is made up of an immense sedimentary plain. Plant life has adapted to these shallow, infertile soils and rocky conditions. One of the more obvious of these is the lichen. Look for lichens growing on the rocks. The lichens help erode the rock down to soil through the action of an acid formed by the plant.

The shrubs and plants that inhabit the understorey of dry forests & heaths are of a particularly hardy nature. They are usually small leaved and often prickly to avoid water loss through evaporation, and leaf loss through grazing animals and insects. These are the plants whose adaptations to fire^{is} by regeneration through hardy capsules opened only by intense heat. In flowering season they are most spectacular, attracting many nectar feeding birds like the honey eaters and lorikeets and many insects and mammals like the sugar glider possum that by means of loose skin joining front and rear limbs enables it to glide between the trees.

Most Australian animals are nocturnal to avoid the heat of the day and hence the necessity to drink often and be close to water and under threat from carnivorous predators like the dingo and wedge-tailed eagle. Consequently they are not often seen during the day. Look for evidence of their presence from scratchings on the ground, on the bark of trees or even their droppings.

It is the beauty of these flowering shrubs and heaths and their attraction to native animals, particularly the birds, that has been instrumental in the trend towards growing and preserving Australian native plants.

The Griffith University development has been designed to work with this natural environment by preserving the unique Australian bushland setting.

The built environment has been confined to contrast with the natural environment, and the natural vegetation of the immediate area re-established after construction of the buildings.

As much of this natural vegetation is disappearing for residential development, this university site is conserving by landscape design a permanent sample of the landscape, plants and animals of the Brisbane Plains.

The Queensland National Parks and Wildlife Service aims to preserve viable samples of all natural ecosystems in national parks, environmental parks and fauna sanctuaries, and by the encouragement of individuals and institutions to work with the natural environment as has been achieved here at Griffith University

This bush walk concludes with your observation of the university building developments that incorporate the preservation and the re-instatement of the vegetation you have seen.

